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January 23, 2014

BY EMAIL MAIL ONLY

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Mr. Steve Rapp
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Chief, Air Technical Unit
USEPA, Region 1
5 Post Office Square, Suite 100
Boston, MA 02109

Re: **AEGIS Energy Services, Inc.**
Voluntary Disclosure of Possible Violations

Gentlemen:

I am the President of AEGIS Energy Services, Inc. (Aegis). Aegis develops, installs and maintains combined heat and power (CHP) modules. This letter serves to report in letter format to the United States Environmental Protection Agency (EPA) that we believe that we may have violated sections of the federal New Source Performance Standards (NSPS), 40 CFR Part 60, Subpart JJJJ (JJJJ, Quad J, or the Regulations).

We also believe that we may have violated the spark plug inspection/change out maintenance requirement under the federal National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE), 40 CFR Part 63, Subpart ZZZZ (ZZZZ or Quad Z).

I have attached **Table 1** that provides, we hope, all of the information relevant to this self-disclosure.

Before getting into the details regarding the specific violations, I want to describe the four entities that this letter references.

As stated above, Aegis develops, installs and maintains CHP modules which include an engine (the affected source under JJJJ or ZZZZ). It sells these modules to third-parties, who are not the

subject of this self-disclosure. Aegis also owns and operates CHP modules at host sites, and Aegis' role as owner/operator of these systems is one of the subjects of this self-disclosure.

In addition, two limited liability companies (LLC) affiliated with Aegis, Powervestors LLC (PV) and Powervestors II LLC (PV II), own and operate CHP modules containing engines on host sites, and these entities also are the subject of this self-disclosure. The two LLCs are referred in this letter as the LLCs.

A separate but related entity, Aegenco, Inc. (Aegenco), manufactures the CHP modules by assembling engine, electrical generation, heat recovery and emissions control components at the Aegis headquarters in Holyoke, Massachusetts. As the manufacturer of the CHP engines, Aegenco is not the subject of this self-disclosure.

Aegis and the LLCs together have annual gross revenues in the range of $9 million to $12 million, which includes sales to third parties. Aegis is a privately-held, family business and employs 50 people at the Aegis headquarters. Employment and revenue information is provided in general terms to illustrate that the Aegis companies are small. **Table 2**, attached and made a part of this letter, sets out the corporate information for the three owner/operator entities.

Based on certain commonalities, and to avoid overly burdensome language differentiating the four entities, we refer collectively to Aegis, the LLC entities, and Aegenco as "Aegis" at various times in this letter. With the same general disclaimer and also for simplicity, I use the pronoun "we" throughout this letter. However, all four entities are separate business organizations, and, as stated above, Aegenco is not the subject of this self-disclosure.

Also as prefatory information, it is very important for me to state that Aegis is genuinely interested in operating in full compliance with all regulations. We are embarrassed that we were unaware of, and later had not better understood what the Regulations required us to do in the correct time frame. However, without wanting to sound defensive, it is important to note that, except for the specified engines in Note 4 on page 3 of **Table 1**, the CHP modules with engines that Aegenco manufactured after July 1, 2008 include air-to-fuel ratio controllers and 3-way catalysts for emissions control. It is also important to note that the test data from a third-party emissions testing company, AirTox Environmental Co. (AirTox) show that emissions from our engines are well below the limits established in the Regulations (see page 5 on **Table 1**). Regarding these results, the unique configuration of the units that AirTox tested is the same as the vast majority of the other engines that are owned and operated by Aegis and the LLCs. These results show that, notwithstanding our past mistake, we are not creating an air pollution problem or causing adverse health impacts by operating our CHP systems. Several of these CHP modules with engines have displaced oil-fired boilers and also electric utility emissions, which have greater emissions and ambient impacts than the gas-fired CHP units.

In addition, we think you should know that we have worked closely with EPA's Combined Heat and Power Partnership, and hope that you will contact Mr. Gary O'Neil to verify that we have been active and engaged partners in this organization. We believe in cogeneration for environmentally efficient energy production and have a proven and long track record that demonstrates that we respect this industry and what it seeks to accomplish vis-à-vis improving the environment.

Disclosure Chronology

We noted above that this disclosure is the 'letter format' disclosure. We used that terminology because Aegis has been in contact with EPA since September 12, 2013 regarding compliance and possible non-compliance with the Regulations. On that date, Diane Molokotos (born Diane Vardakas, my sister), contacted Mr. Roy Crystal at EPA Region 1 to discuss the applicability of the Regulations to Aegis' CHP systems. Diane then attended an EPA Workshop presented by Mr. Crystal in Holyoke, Massachusetts. Mr. Crystal invited participants to come up and ask questions, which Diane did. During their focused discussion on applicability of the Regulations to Aegis' work, Mr. Crystal suggested that Diane contact Ms. Melanie King, a writer of the NSPS regulations, because he was not as familiar with these specific regulations as is Ms. King.

On September 23, 2013, Diane emailed Ms. King with questions regarding applicability of the Regulations to Aegis' work. Ms. King answered some but not all of the questions in an email and also suggested a telephone call to discuss the remaining answers.

On September 26, 2013, Ms. King offered October 8 as a possible time for a telephone call, which, she suggested, would focus on compliance assistance and what NSPS requires, and then would focus on providing information as to who else Diane might contact with site-specific questions.

On October 1, 2013, Mr. Crystal emailed Diane and said that the federal Government Shutdown might mean that the October 8 call would not be possible. The October 8 call was cancelled due to the Shutdown. Mr. Crystal later suggested that Diane write him a formal letter with her questions so that he may get them addressed.

On October 30, 2013, Aegis sent a letter to Mr. Crystal with specific questions.

On November 25, 2013, Mr. Steve Rapp called Diane to inform Aegis that the Aegis matter was now being handled by Enforcement.

On December 5, 2013, Aegis' newly retained representatives (outside air permitting and regulatory consultant, Mr. Michael Holzman, and outside environmental counsel, Ms. Abbie Baker) convened a conference call with Mr. Rapp to discuss the Aegis matter, and what the next steps should and would be. Specifically, there was a discussion as to what Aegis' business is, what the Aegis CHP systems are comprised of (focusing on the level of engine modification or "trimming" that is performed by Aegis), and the like. Mr. Rapp was informed that to make future discussions more efficient, we would provide a detailed table with information that would assist EPA and all

of us in determining what Aegis needs to do to be in full compliance and in what time frame. That table is attached hereto as **Table 1**.

As the above chronology indicates, Aegis was involved with EPA representatives for several months attempting in good faith to understand what Regulations were applicable to its business and how to comply with them. While some of our approach may have appeared to be naïve, it was all well-intentioned and based on a willingness to comply with the Regulations. We remain willing to comply with the Regulations and to cooperate with EPA in every way. The major issue for us is that the Regulations are dense and not readily understandable by the so-called "uninitiated." This was the reason that in early December Aegis retained Mr. Holzman and Ms. Baker. For the reasons and time frame set out above, Aegis respectfully requests that the reaction time line for reporting and compliance be extended and be dealt with as part of our ongoing discussions with EPA. Further, we are submitting this self-disclosure without prejudice to our right to amend or supplement it after additional conversations among EPA representatives, Aegis, and our representatives take place.

How the Subject CHP Modules with Engines are Manufactured

Aegenco, the manufacturer of the CHP modules containing engines, purchases a 7.4 liter, V-8 engine long block from Power Systems, Inc. It is a plain engine block that Aegenco then trims to become a (certifiable) CHP engine. The completely trimmed-out engines that Aegenco manufactures are <500HP, 100.3 HP, 75 kW, natural gas-fired, spark-ignition (SI), rich burn (RB), four-stroke (4S) engines controlled with fuel-air controllers and catalytic converters. These engines are not "certified."[1]

After purchasing the engine long block, Aegenco adds nearly 20 components to trim out the engine. Much of the innovation at Aegenco over the past 10 years has come from ever-improving equipment design to reduce emissions. The significant equipment components are described below. As you may note, many of these components play a role in emissions control.

Carb Air Box - brings in combustion air through an external air filter;

Throttle/Mixer Body with Gasket - effective control of power output; (not needed on new Continental models);

Exhaust Manifold- designed to direct exhaust gases from the cylinder heads to the catalytic converter while recovering waste heat from the cylinder heads;

[1] Since we perform our own extensive trim-out of the engine block that we purchase, the only entity that could certify our CHP module engines is Aegenco. As is discussed later in this self-disclosure, Aegis is interested in determining with EPA whether it is advisable to, and/or is it possible to actually certify our engines for purposes of compliance with the regulations.

Catalytic Converter - with temperature probes to measure pre- and post-gas temperatures as the gas passes through the catalytic material; each engine is equipped with two catalysts, one for each bank of cylinders;

Oxygen sensors - measures the level of oxygen and adjust the fuel mixture accordingly;

Exhaust Gas Heat Exchanger – directs exhaust gases to the stack while removing the waste heat from the gases;

Remote Monitoring of O2 - a remotely-monitored diagnostic sensor. The installed O2 sensor sends feedback to the fuel control system to regulate exhaust gases so it is continually monitoring itself; and

Woodward or Continental fuel/air ratio controller - together with O2 sensor controls the precise air/fuel ratio for optimal combustion.

Once installed and operating, each CHP module containing a trimmed engine is remotely monitored in a control room at Aegis' headquarters, in real time, on a "24/7" basis, to ensure that it is operating optimally, and to ensure that there are no conditions within the site's entire HVAC loop that could cause a disturbance or shutdown.

Aegenco CHP Modules Trimmed Between 2008 - 2012
Low emissions for these older models are achieved with a single-layer catalytic converter. This catalytic converter is coupled with the exhaust gas heat exchanger. The fuel control is managed by a natural gas carburetor, a Woodward gas trim control, which is less sophisticated than the later Continental controller because it is not equipped with computer control of the air-to-fuel ratio.

Please refer to the AirTox results on the emissions for these models conducted on November 4, 2011 and May 9, 2012 (page 5, **Table 1**).

Aegenco CHP Modules Trimmed 2013 and forward
On the newer CHP modules, low emission levels are achieved with the use of a full authority gas regulation system (Continental), along with a dual-layer catalytic converter setup, which allows the engines to meet stringent air permitting requirements such as, for example, those required in New Jersey. This catalytic converter is coupled with the exhaust gas heat exchanger.

Fuel control is managed by a closed-loop, electronic gas carburetor (EGC) using a narrow-band oxygen sensor for the rich-burn operation and precise control of the fuel mixture allowing for NO_x and CO levels well below the allowable limits. Please refer to AirTox results on page 5 of **Table 1** for the Woodward and Continental models.

Note that the Woodward model is the one that has been used until November 2013, when we converted to the Continental model. As such, the test results on the Woodward model equipped with catalysts are representative of virtually all of the Aegis or LLCs owned/operated CHP modules with engines (except for the ones that are the subject of Notes 4 and 6 on page 3 of **Table 1**). The current model, the Continental, achieves even lower emissions than the Woodward, as indicated from the results of the November 25, 2013 AirTox test program summarized on page 5 of **Table 1**.

The final product today, the "Aegen TP-75," is a packaged, compact, modular CHP engine capable of producing 75 kW of power and 5.23 therms of heat per hour. The CHP module has a natural gas-fired reciprocating engine, induction generator, heat recovery system, sound attenuating enclosure, electrical switchgear, and solid-state controls for automatic and unattended operation. High efficiency heat recovery components consist of oil cooler, engine jacket for heat transfer, marine type exhaust gas manifolds and exhaust gas heat exchangers.

Real-time Monitoring of Operating Parameters
The operating parameters of the CHP modules are all monitored in real time at our headquarters in on a master control board. We invite EPA to visit our headquarters to see how extensively the engine blocks are modified/trimmed-out and to see the control room.

Aegis' Routine and Major Maintenance Program/Maintenance Practices
The remote monitoring at our headquarters, together with our extensive maintenance program ensure the nearly total use of waste heat, which provides consistent energy savings for site users. The high efficiencies and energy savings also result in reduced emissions. **Table 3** lists the tasks included in the routine and major maintenance programs.

Because CHP technology relies on heat recovery to satisfy its economic and environmental claims, we change out the engine block and the emissions control equipment as needed to achieve the goals of CHP. The time of change out of the engine blocks is dependent on run time and oil consumption, and typically occurs at approximately 30,000 hours of run time. This may correspond to approximately every 2-5 years. This is considered part of our major maintenance. Our routine maintenance ensures that the CHP engine is running optimally between major maintenance change-outs.

At the time of an engine block change-out, both the catalyst and gas heat exchanger are inspected for residue buildup. If there is buildup, then both the catalyst and heat exchanger are also replaced. Both are replaced because they are coupled.

Catalysts and heat exchangers may be changed out even when engine blocks are not replaced. If exhaust gas temperatures are too high it means that the engine heat is not being properly recovered through the gas heat exchanger and, therefore, the high efficiency of CHP is not being realized. Stack exhaust gas temperatures are remotely monitored at our headquarters, and change-out

requirements of these components are evaluated in real time. Again, if the heat exchanger is being changed, the catalyst also will be changed. Emissions are optimally controlled because the catalyst is being replaced on an as-needed basis.

Please note that we do not believe that replacement of the engine block, catalytic converter or heat exchanger constitute a modification or reconstruction as defined in the applicable regulations, or otherwise changes the date of manufacture to the date of the latest major maintenance. See discussion below in Performance Tests.

As shown on **Table 3**, our maintenance program does not call out inspecting and changing the spark plugs every 1,440 hours of run time as has been required under ZZZZ since October 19, 2013. Previous to that date, we had changed the spark plugs every 1,500 hours of run time. At this time, it has not been determined if we have violated this spark plug maintenance requirement after October 19, 2013. Although we are in the process of changing our spark plug maintenance schedule so that the spark plugs are inspected and changed, if necessary, every 1,440 hours, we herein request approval to change the spark plugs at the interval deemed appropriate by our maintenance supervisor consistent with our overall maintenance program philosophy.

Performance Tests

As stated above, the Aegenco CHP module engines are not certified, and Aegis and the LLCs did not cause performance testing in accordance with JJJJ (which requires performance testing on engines manufactured after July 1, 2008) on the engines that we own/operate. We, did, however, test the engines at our headquarters using a Ferret Instruments GasLink LT Emissions Analyzer (Ferret Analyzer). In addition, we did cause a third-party company, AirTox, to do performance testing on the same unique CHP module engine configuration as those that were tested with the Ferret Analyzer. Please see page 5 of **Table 1.** The module configuration is the Aegen TP-75 Woodward model (and then later on the double layer catalyst Continental model). The Woodward configuration is the same configuration as the vast majority of the engines in the Aegis and LLCs fleet of owned/operated engines.

As shown, the AirTox emissions standards test results are all below the JJJJ standards. AirTox used the EPA Reference Methods specified in JJJJ for this testing. Using the AirTox data, and understanding that it was the same configuration engine as the vast majority of the others in the Aegis and LLCs fleet of owned/operated engines, pursuant to 40 CFR Part 60 Section 60.8, we herein request that the Woodward configuration of CHP engines be deemed to have been performance tested in accordance with the Regulations.

In the spirit of full disclosure, you may note on page 4 of **Table 1** that there are Ferret Analyzer test results that are highlighted in yellow. These results are anomalous. The gentleman that performed these tests has retired, and we cannot discern a reason for the anomalous results. It should be noted, however, that engines and/or catalysts have since been replaced on several of these systems thereby rendering that anomalous data more or less irrelevant.

J2KN Pro Industrial Analyzer

During the last quarter of 2013, Aegenco purchased from ECOM America, Ltd. (Ecom) a state-of-the-art emissions analyzer, the J2KN PRO Industrial Analyzer with associated components (Ecom Analyzer), and will start performing its internal emissions test with this device. This device is a portable electrochemical analyzer capable of performing the CTM-034 Method[2], which, as we understand it, is the functional equivalent of ASTM Method D6522-00, referenced as an applicable test method. However, the Analyzer or Method above does not include VOC testing or require three one-hour tests. Again, as part of our ongoing discussions with EPA, if certification of the engines that Aegenco manufactures is not possible or preferable, we may seek approval under the procedures and authority of 40 CFR Part 60, Section 60.8, as further discussed below, to use this Analyzer and Method, supplemented by a separate method or use of CO testing as a surrogate for VOC.

Performance Testing Now and in the Future

Prospectively, we would appreciate the opportunity to work with EPA to establish a procedure to certify Aegenco's CHP module engines. If we cannot develop a procedure for certification of these engines, or, if that procedure is ultimately considered not to represent the preferred alternative, we believe that there are a couple of alternatives to satisfy the regulatory performance testing requirement under 40 CFR Part 60, Section 60.8. Preliminarily, for example, pending discussions with EPA, we would propose to have a third-party such as AirTox perform the testing in accordance with the Regulations. The third-party tester would perform this testing on one engine that is representative of each unique configuration of the CHP modules with engines that Aegenco manufactures and that Aegis and the LLCs own and operate. If in compliance with the Regulations, all engines in that grouping would be deemed satisfactorily performance-tested under the Regulations.

Although this next step may not be necessary if the above is acceptable, once shown to be in compliance based on the results from the third-party tester, we could also, for example, perform our internal testing using our Ecom Analyzer on the same unit that the third-party company tested, and retain both sets of results. On all other models of the same unique configuration, we would use our Ecom Analyzer on some to-be-determined representative number of engines to demonstrate compliance of all of the engines of that unique configuration. As noted above, because the Ecom Analyzer does not test VOC emissions, we may also seek EPA approval for alternate VOC testing methods, perhaps using CO test results as a surrogate for VOC. While this approach is a possibility, because each of the engines of the same unique configuration are trimmed out identically, the one set of third-party results should satisfy the JJJJ performance test requirement for that "batch" of uniquely configured/trimmed engines.

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[2] EPA's Technology Transfer Network – Emission Measurement Center – Conditional Test Methods, *Draft Method for the Determination of 02, CO & (NO and NO2) for Periodic Monitoring,* also referred to by The Institute of Clean Air Companies as *Test Method – Determination of Oxygen, Carbon Monoxide and Oxides of Nitrogen from Stationary Sources – For Periodic Monitoring (Portable Electrochemical Analyzer Procedure).*

As stated above, we do not believe that performance testing is required after Aegis' major maintenance work on the in-use engines. Replacement of the engine block, catalytic converter or heat exchanger do not constitute a modification or reconstruction as defined in the applicable regulations or otherwise changes the date of manufacture to the date of the latest major maintenance. Specifically, CHP module engine maintenance, including component replacement, does not meet the criteria in 40 CFR 60.14 for a modification because an increase in emissions would not result, and the types of maintenance, repair and replacement activities are considered routine for this source category. In addition, replacement of the engine block and other components does not meet the criteria in 40 CFR 60.15 for a reconstruction, as the fixed capital cost of the new components does not exceed 50 percent of the fixed capital cost that would be required to construct a comparable entirely new unit.

In summary, there is regulatory basis for EPA's approving equivalent and alternate methods for performance testing, or EPA's waiving the requirement for performance testing, in 40 CFR Part 60 Section 60.8. We would like to discuss the approaches presented above (and perhaps others that may flow from the discussions) with EPA.

Conditions for Audit Policy Benefits

Regarding the conditions for EPA Audit Policy benefits, we have set out below our thoughts as to penalty mitigation tracking the Audit Policy document.

1. Systematic discovery. We are a very small company, and have not yet developed a formal compliance management system. However, Diane had and has taken on the responsibility to learn and understand the applicable regulations for Aegis. She and I have been working and will continue to work together to implement the regulations. In conjunction with Mr. Holzman, our air permitting consultant, we will develop a methodology to ensure that, once in compliance with the air regulations, Aegis will maintain that compliance on a moving forward basis.

As you may note from the "Disclosure" section of this letter above, Diane took her compliance work very seriously, and was in close contact with EPA to better understand the Regulations. There is no doubt that given the complexity of the Regulations, Mr. Holzman will be able to assist us moving forward. Diane has also started to review the Federal Register on a daily basis to become familiar with the activities of EPA and various states to have early notice of regulations that may impact our business.

Finally, in conjunction with Mr. Holzman, we will develop a systematic method to review upcoming regulations that may impact Aegis, and will convene periodic meetings to discuss any such findings and develop a planning and implementation schedule.

2. Voluntary discovery. As is clear from other portions of this disclosure, the violations were not detected as a result of a legally required monitoring, sampling or auditing procedures, and were strictly voluntary.

3. Prompt disclosure. As stated above, we have been in contact with EPA representatives (and most recently with Mr. Rapp) for several months as our internal audit was revealing possible violations. We believe that we have satisfied the 21 days of discovery disclosure requirement to receive an Audit Policy benefit.

4. Independent discovery and disclosure. We cannot be certain that a regulator would likely have identified the violation through its own investigation. However, we do know that in the course of consulting with the third-party testing company, that company did not identify violations. This may not be completely fair to that company because an audit was not requested. Please note that we did not initially hire that company after discovering that we were in possible noncompliance. We have been working with that company since 2011. However, since the initial 2011 engagement, we have asked that company to perform additional performance testing in conjunction with our work with the State of New Jersey Department of Environmental Protection (NJDEP) for our engine certification under its standards.[3]

5. Correction and Remediation. In the course of discovering our possible noncompliance with the Regulations, we retained Mr. Holzman and Ms. Baker in order to assist us in coming into compliance as immediately as possible given our fleet.

In addition, as soon as we understood what the Regulations required and evaluated our fleet, we determined that the seven units that are the subject of Notes 4, 5 and 6 on page 3 of **Table 1** were not equipped with catalytic converters. By the end of December 2013, catalytic converters were installed on two of the units. We proposed having the catalytic converters installed on the remaining five units on or before February 28, 2014.

We cannot initially performance-test the vast majority of the already-manufactured CHP units in our owned and operated fleet because the initial year has passed, and we do not believe that we are required to performance test after our major maintenance for the reasons stated earlier in this letter. Pending the outcome of our discussions with EPA, we hope to be able to deem the in-service CHP units that are the same configuration as the Woodward and Continental configurations that AirTox tested in compliance with the Regulations, or otherwise have this requirement waived. We believe that 40 CFR Part 60 Section 60.8 provides the basis and methodology for this outcome.

We also believe that our maintenance program exceeds the regulatory requirements, notwithstanding the minor discrepancy with the spark plug inspection/change out requirement. For all of these reasons, and based on other information contained in this disclosure, and including our upcoming discussions with EPA, we respectfully request a waiver of the sixty-day correction and remediation requirement to obtain the Audit Policy benefits.

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[3] As of the date of this letter, the New Jersey Corporation for Advanced Technology has determined that the Aegenco Aegen TP-75 CHP module with Continental controller and dual layer catalytic converters is an insignificant source of air emissions. This is the initial step in New Jersey for certification of the CHP system. The next step is review and approval by a Board at NJDEP.

6. Repeat Violations. While it is the case that the initial performance testing requirement for some of Aegis' and the LLCs CHP owned/operated engines is not possible now, we believe that the testing, whether at the compliance deadline or later, should be considered as one testing event because the AirTox results indicate compliance with the limits. There is no express prohibition in 40 CFR Part 60, Section 60.8 from being able to seek a retroactive compliance methodology (waiver, etc). Therefore, the lack of initial performance testing on each CHP unit is not a "repeat" violation as may be contemplated by this requirement.

7. Ineligible Violations. Using the AirTox data as the reference point, the emissions from virtually all of the Aegis and LLCs owned/operated CHP engines are below Regulatory emissions limits. As such, in spite of having failed to purchase certified engines or to cause third-party performance testing on each unit, we have not caused serious actual harm that may have presented an imminent and substantial endangerment to people or the environment. Further, the failures did not violate any terms of an administrative or judicial order or consent agreement (there are none). Regarding the units that are the subject of Notes 4, 5 and 6 on page 3 of **Table 1**, we do not believe that we have caused serious actual harm that may have presented an imminent and substantial endangerment to people or the environment, and the failures did not violate any terms of an administrative or judicial order or consent agreement (there are none).

8. Cooperation. We hope that we have shown full cooperation with EPA. We will continue to cooperate with EPA, openly and in good faith.

Summary and List of Questions

We hope we have demonstrated that:

1. Aegis did not intentionally violate the NSPS regulations, and attempted to understand them, albeit somewhat late.

2. The standard methodology that Aegenco currently uses to modify or trim the engine blocks that it purchases produces CHP modules that have every reasonable or expected emissions limit control on them, and that the emissions are below regulatory limits. Please note the exception for the seven units that have undergone or are in the process of undergoing corrective action.

3. The routine and major maintenance programs that Aegis undertakes is in substantial and material compliance with JJJJ and ZZZZ, and in most cases, exceed the regulatory requirements.

As of the date of this disclosure letter, we think that the questions that we need to work with EPA to resolve or develop protocols or procedures to resolve are as follows:

1. How can Aegenco achieve status such that it can perform the certification of the engines it manufactures in accordance with the regulations, if this is determined to be the preferable route for Aegis to take?

2. If we cannot certify our units, or it is not preferable to do so, then how does Aegis come into compliance with the initial performance testing requirement on the already-manufactured CHP units in that virtually all of them have undergone engine block, catalyst and heat exchanger replacements? We offered possible solutions to this issue in the body of this letter, including use of the AirTox performance testing and results on the unique configuration that was used on our entire fleet until recently. As stated above, there is regulatory basis for EPA's approving equivalent and alternate methods, and EPA's waiving the requirement for performance testing.

3. May we establish an alternate spark plug inspection/replacement schedule consistent with our established routine maintenance program?

At various times, a number of Aegis and EPA representatives have suggested a conference call in order to discuss and evaluate our situation, which we embrace. We hope that the attached compliance Table provides you with a coherent summary of the facts as they relate to this matter and sets the framework for a meaningful discussion.

For manageability purposes, we propose designating Ms. Baker (203-230-0303; AbbieBaker@comcast.net) as the contact for us and look forward to receiving EPA's designated contact person. Together, they could make arrangements for a conference call once you have had the chance to digest our information. If before such a conference call, additional information is needed, please contact Ms. Baker and she will work with Mr. Holzman and us to expeditiously supply that information to you.

Very truly yours,

Lee Vardakas
President
(leev@aegisenergyservices.com)

Attachments:
1. Compliance Table
2. Corporate Structure Table
3. Routine and Major Maintenance Table

Copies with Attachments by email only:
1. Mr. Julius Banks – Banks.julius@epa.gov
2. Ms. Sara Froikin – Froikin.sara@epa.gov

3. Ms. Melanie King – King.melanie@epa.gov
4. Mr. Roy Crystal – Crystal.roy@epa.gov
5. Mr. Michael Holzman – mike@miholzman.com
6. Ms. Abbie Baker – abbiebaker@comcast.net
7. Diane Vardakas – dianem@aegisenergyservices.com

Table 1: AEGIS Energy Services/PV LLC/PV II LLC Owned/Operated CHP Units
Compliance Information

Engine Location	# of units	Model # / Description (engine block mfg./source)	Fuel Controller Mfg./model	Catalyst Description (none, single- or double-layer)	Engine Classification	HP	Construction Date (date of purchase, lease or acquisition)	Installation / 1st Operation Date	Applicable Regulation	Owned By
Holyoke A/Holyoke MA	1	Tecogen		none	4SRB	100.3	1988	1988	NESHAP ZZZZ	Aegis
Holyoke B/Holyoke MA	1	Aegen TP-75		none	4SRB	100.3	1988	1988	NESHAP ZZZZ	Aegis
Ashlar 1 and 2/Newtown CT	2	Tecogen		none	4SRB	100.3	Jun-98	Jun-98	NESHAP ZZZZ	Aegis
Harbor Point 15SP/Boston MA	1	Tecogen		none	4SRB	100.3	Mar-02	Mar-02	NESHAP ZZZZ	Aegis
Harbor Point 40WW/Boston MA	1	Tecogen		none	4SRB	100.3	Mar-02	Mar-02	NESHAP ZZZZ	Aegis
Harbor Point 47SP/Boston MA	1	Tecogen		none	4SRB	100.3	Mar-02	Mar-02	NESHAP ZZZZ	Aegis
Harbor Point 55WW/Boston MA	1	Tecogen		none	4SRB	100.3	Mar-02	Mar-02	NESHAP ZZZZ	Aegis
Pequot Highlands/Salem MA	1	Tecogen		none	4SRB	100.3	Jan-04	Jan-04	NESHAP ZZZZ	Aegis
Whitney Place/Natick MA	1	Aegen TP-75		none	4SRB	100.3	Jul-05	Jul-05	NESHAP ZZZZ	Aegis
Sahara Sams/West Berlin NJ	3	Aegen TP-75	Woodward	single layer	4SRB	100.3	Mar-09	Mar-09	NSPS JJJJ	Aegis
St Mary's WCH/Boston MA	1	Aegen TP-75	Woodward	single layer	4SRB	100.3	Dec-10	Dec-10	NSPS JJJJ	Aegis
Carden Hall/New York NY	1	Aegen TP-75	Woodward	single layer	4SRB	100.3	Jun-11	Jun-11	NSPS JJJJ	Aegis
Bay Ridge 1 and 2/NY NY	2	Aegen TP-75	Woodward	single layer	4SRB	100.3	Jan-08	Jan-08		PV LLC
Conte School/New Haven CT	1	Aegen TP-75	Woodward	single layer	4SRB	100.3	Nov-09	Nov-09	NSPS JJJJ	PV LLC
Hill Regional/New Haven CT	1	Aegen TP-75	Woodward	single layer	4SRB	100.3	Nov-09	Nov-09	NSPS JJJJ	PV LLC
James Hillhouse/New Haven CT	1	Aegen TP-75	Woodward	single layer	4SRB	100.3	Nov-09	Nov-09	NSPS JJJJ	PV LLC
Martinez school/New Haven CT	1	Aegen TP-75	Woodward	single layer	4SRB	100.3	Nov-09	Nov-09	NSPS JJJJ	PV LLC
Schwab House/NY NY #1	1	Aegen TP-75	Woodward	single layer	4SRB	100.3	Nov-09	Nov-09	NSPS JJJJ	PV LLC
Schwab House/NY NY #2	1	Aegen TP-75	Woodward	single layer	4SRB	101.3	Nov-09	Nov-09	NSPS JJJJ	PV LLC
Schwab House/NY NY #3	1	Aegen TP-75	Woodward	single layer	4SRB	102.3	Nov-09	Nov-09	NSPS JJJJ	PV LLC
Schwab House/ NY NY #4	1	Aegen TP-75	Woodward	single layer	4SRB	103.3	Nov-09	Nov-09	NSPS JJJJ	PV LLC
Sound School/New Haven CT	1	Aegen TP-75	Woodward	single layer	4SRB	104.3	Nov-09	Nov-09	NSPS JJJJ	PV LLC
Wilbur Cross HS/New Haven CT	1	Aegen TP-75	Woodward	single layer	4SRB	105.3	Nov-09	Nov-09	NSPS JJJJ	PV LLC
Trump Village/NY NY #1	1	Aegen TP-75	Woodward	single layer	4SRB	106.3	Mar-10	Mar-10	NSPS JJJJ	PV LLC
Trump Village/NY NY #2	1	Aegen TP-75	Woodward	single layer	4SRB	107.3	Mar-10	Mar-10	NSPS JJJJ	PV LLC
Trump Village/NY NY #3	1	Aegen TP-75	Woodward	single layer	4SRB	108.3	Mar-10	Mar-10	NSPS JJJJ	PV LLC
Trump Village/NY NY #4	1	Aegen TP-75	Woodward	single layer	4SRB	109.3	Mar-10	Mar-10	NSPS JJJJ	PV LLC
Harway Terrace/NY NY	1	Aegen TP-75	Woodward	single layer	4SRB	100.3	Mar-12	Mar-12	NSPS JJJJ	PV II LLC
Stevenson Commons/ NY NY #1	1	Aegen TP-75	Woodward	single layer	4SRB	100.3	Mar-12	Mar-12	NSPS JJJJ	PV II LLC
Stevenson Commons/ NY NY #2	1	Aegen TP-75	Woodward	single layer	4SRB	101.3	Mar-12	Mar-12	NSPS JJJJ	PV II LLC
Stevenson Commons/ NY NY #3	1	Aegen TP-75	Woodward	single layer	4SRB	102.3	Mar-12	Mar-12	NSPS JJJJ	PV II LLC
Stevenson Commons/ NY NY #4	1	Aegen TP-75	Woodward	single layer	4SRB	103.3	Mar-12	Mar-12	NSPS JJJJ	PV II LLC
Stevenson Commons/ NY NY #5	1	Aegen TP-75	Woodward	single layer	4SRB	104.3	Mar-12	Mar-12	NSPS JJJJ	PV II LLC
Stevenson Commons/ NY NY #6	1	Aegen TP-75	Woodward	single layer	4SRB	105.3	Mar-12	Mar-12	NSPS JJJJ	PV II LLC
Stevenson Commons/NY NY #7	1	Aegen TP-75	Woodward	single layer	4SRB	106.3	Mar-12	Mar-12	NSPS JJJJ	PV II LLC
Westcott Terrace/W Warwick RI	1	Aegen TP-75	Woodward	single layer	4SRB	100.3	Dec-12	Apr-13	NSPS JJJJ	PV II LLC
NHJCC/ New Haven CT	1	Aegen TP-75	Woodward	single layer	4SRB	100.3	Apr-13	Apr-13	NSPS JJJJ	PV II LLC
The Ohm/NY NY	1	Aegen TP-75	Woodward	single layer	4SRB	100.3	Jul-13	Jul-13	NSPS JJJJ	PV II LLC
25 Tudor/NY NY	1	Aegen TP-75	Woodward	single layer	4SRB	100.3	Nov-13	Nov-13	NSPS JJJJ	PV II LLC

Table 1: AEGIS Energy Services/PV LLC/PV II LLC Owned/Operated CHP Units
Compliance Information

	NESHAP ZZZZ Compliance Status (compliance date = 10/19/2013)						
	Management Practices (63.6603(a), Table 2d, no. 7)[1]						
Engine Location	**Change oil and filter every 1,440 hours of operation or annually, whichever comes first**	**Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary**	**Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary**	**Follow mfgs.'s maintenance plan (63.6625(e))**	**Idle time during startup <30 min. (63.6625(h))**	**General duty requirements to operate and maintain RICE according to the manufacturer's emission-related operation and maintenance instructions (63.6605, 63.6640 and Table 6)**	**Recordkeeping (63.6655, except (c) and (f))**
Holyoke A/Holyoke MA	Yes	Yes	NA - no hoses/belts	Yes	Yes	Yes	Yes
Holyoke B/Holyoke MA	Yes	Yes	NA - no hoses/belts	Yes	Yes	Yes	Yes
Ashlar 1 and 2/Newtown CT	Yes	Yes	NA - no hoses/belts	Yes	Yes	Yes	Yes
Harbor Point 15SP/Boston MA	Yes	Yes	NA - no hoses/belts	Yes	Yes	Yes	Yes
Harbor Point 40WW/Boston MA	Yes	Yes	NA - no hoses/belts	Yes	Yes	Yes	Yes
Harbor Point 47SP/Boston MA	Yes	Yes	NA - no hoses/belts	Yes	Yes	Yes	Yes
Harbor Point 55WW/Boston MA	Yes	Yes	NA - no hoses/belts	Yes	Yes	Yes	Yes
Pequot Highlands/Salem MA	Yes	Yes	NA - no hoses/belts	Yes	Yes	Yes	Yes
Whitney Place/Natick MA	Yes	Yes	NA - no hoses/belts	Yes	Yes	Yes	Yes
Sahara Sams/West Berlin NJ	NA	NA	NA	NA	NA	NA	NA
St Mary's WCH/Boston MA	NA	NA	NA	NA	NA	NA	NA
Carden Hall/New York NY	NA	NA	NA	NA	NA	NA	NA
Bay Ridge 1 and 2/NY NY	NA	NA	NA	NA	NA	NA	NA
Conte School/New Haven CT	NA	NA	NA	NA	NA	NA	NA
Hill Regional/New Haven CT	NA	NA	NA	NA	NA	NA	NA
James Hillhouse/New Haven CT	NA	NA	NA	NA	NA	NA	NA
Martinez school/New Haven CT	NA	NA	NA	NA	NA	NA	NA
Schwab House/NY NY #1	NA	NA	NA	NA	NA	NA	NA
Schwab House/NY NY #2	NA	NA	NA	NA	NA	NA	NA
Schwab House/NY NY #3	NA	NA	NA	NA	NA	NA	NA
Schwab House/ NY NY #4	NA	NA	NA	NA	NA	NA	NA
Sound School/New Haven CT	NA	NA	NA	NA	NA	NA	NA
Wilbur Cross HS/New Haven CT	NA	NA	NA	NA	NA	NA	NA
Trump Village/NY NY #1	NA	NA	NA	NA	NA	NA	NA
Trump Village/NY NY #2	NA	NA	NA	NA	NA	NA	NA
Trump Village/NY NY #3	NA	NA	NA	NA	NA	NA	NA
Trump Village/NY NY #4	NA	NA	NA	NA	NA	NA	NA
Harway Terrace/NY NY	NA	NA	NA	NA	NA	NA	NA
Stevenson Commons/ NY NY #1	NA	NA	NA	NA	NA	NA	NA
Stevenson Commons/ NY NY #2	NA	NA	NA	NA	NA	NA	NA
Stevenson Commons/ NY NY #3	NA	NA	NA	NA	NA	NA	NA
Stevenson Commons/ NY NY #4	NA	NA	NA	NA	NA	NA	NA
Stevenson Commons/ NY NY #5	NA	NA	NA	NA	NA	NA	NA
Stevenson Commons/ NY NY #6	NA	NA	NA	NA	NA	NA	NA
Stevenson Commons/NY NY #7	NA	NA	NA	NA	NA	NA	NA
Westcott Terrace/W Warwick RI	NA	NA	NA	NA	NA	NA	NA
NHJCC/ New Haven CT	NA	NA	NA	NA	NA	NA	NA
The Ohm/NY NY	NA	NA	NA	NA	NA	NA	NA
25 Tudor/NY NY	NA	NA	NA	NA	NA	NA	NA

1. Unless otherwise stated, "NA" means not applicable, because unit was manufactured on or before 7/1/2008 and is subject to NSPS JJJJ, rather than NEHSAP ZZZZ or was ordered after 6/12/2006 and manufacured before 7/1/2008, in which case it is not subject to either NSPS JJJJ or NESHAP ZZZZ (e.g., Bay Ridge 1 and 2/NY NY).

Table 1: AEGIS Energy Services/PV LLC/PV II LLC Owned/Operated CHP Units
Compliance Information

	NSPS JJJJ Compliance Status					
	Compliance with Emissions Stds.				Notification, reports and records (40.4245(a), (d))	
Engine Location	Option 1: Purchase engines certified by mfg. to meet the stds. in Table 1 (60.4231(e)).	Option 2: Conduct Performance Test Demonstrating compliance w/ Table 1 stds. within 1 year of startup	After July 1, 2008, SI ICE <500 HP that do not meet applicable requirements in 60.4233 (Table 1 stds.) may not be installed	Conduct maintenance according to maintenance plan and keep records (60.4243(b)(2)(i)) and appropriately operate/maintain AFR controller (60.4243(g))	Keep records of notifications, maintenance conducted, certifications (if applicable), performance tests (if applicable)	Notification of performance testing (60.4245(d))
Holyoke A/Holyoke MA	NA	NA	NA	NA	NA	NA
Holyoke B/Holyoke MA	NA	NA	NA	NA	NA	NA
Ashlar 1 and 2/Newtown CT	NA	NA	NA	NA	NA	NA
Harbor Point 15SP/Boston MA	NA	NA	NA	NA	NA	NA
Harbor Point 40WW/Boston MA	NA	NA	NA	NA	NA	NA
Harbor Point 47SP/Boston MA	NA	NA	NA	NA	NA	NA
Harbor Point 55WW/Boston MA	NA	NA	NA	NA	NA	NA
Pequot Highlands/Salem MA	NA	NA	NA	NA	NA	NA
Whitney Place/Natick MA	NA	NA	NA	NA	NA	NA
Sahara Sams/West Berlin NJ	No	No (3)	No (5)	Yes	No (7)	No (7)
St Mary's WCH/Boston MA	No	No (3)	No (5)	Yes	No (7)	No (7)
Carden Hall/New York NY	No	No (3)	No (5)	Yes	No (7)	No (7)
Bay Ridge 1 and 2/NY NY	NA	NA	NA	NA	NA	NA
Conte School/New Haven CT	No	No (4)	No (6)	Yes	No (7)	No (7)
Hill Regional/New Haven CT	No	No (4)	No (6)	Yes	No (7)	No (7)
James Hillhouse/New Haven CT	No	No (4)	No (6)	Yes	No (7)	No (7)
Martinez school/New Haven CT	No	No (4)	No (6)	Yes	No (7)	No (7)
Schwab House/NY NY #1	No	No (3)	No (5)	Yes	No (7)	No (7)
Schwab House/NY NY #2	No	No (3)	No (5)	Yes	No (7)	No (7)
Schwab House/NY NY #3	No	No (3)	No (5)	Yes	No (7)	No (7)
Schwab House/ NY NY #4	No	No (3)	No (5)	Yes	No (7)	No (7)
Sound School/New Haven CT	No	No (4)	No (6)	Yes	No (7)	No (7)
Wilbur Cross HS/New Haven CT	No	No (4)	No (6)	Yes	No (7)	No (7)
Trump Village/NY NY #1	No	No (3)	No (5)	Yes	No (7)	No (7)
Trump Village/NY NY #2	No	No (3)	No (5)	Yes	No (7)	No (7)
Trump Village/NY NY #3	No	No (3)	No (5)	Yes	No (7)	No (7)
Trump Village/NY NY #4	No	No (3)	No (5)	Yes	No (7)	No (7)
Harway Terrace/NY NY	No	No (4)	No (6)	Yes	No (7)	No (7)
Stevenson Commons/ NY NY #1	No	No (3)	No (5)	Yes	No (7)	No (7)
Stevenson Commons/ NY NY #2	No	No (3)	No (5)	Yes	No (7)	No (7)
Stevenson Commons/ NY NY #3	No	No (3)	No (5)	Yes	No (7)	No (7)
Stevenson Commons/ NY NY #4	No	No (3)	No (5)	Yes	No (7)	No (7)
Stevenson Commons/ NY NY #5	No	No (3)	No (5)	Yes	No (7)	No (7)
Stevenson Commons/ NY NY #6	No	No (3)	No (5)	Yes	No (7)	No (7)
Stevenson Commons/NY NY #7	No	No (3)	No (5)	Yes	No (7)	No (7)
Westcott Terrace/W Warwick RI	No	No (3)	No (5)	Yes	No (7)	No (7)
NHJCC/ New Haven CT	No	--- (8)	--- (8)	Yes	--- (9)	--- (8)
The Ohm/NY NY	No	--- (8)	--- (8)	Yes	--- (9)	--- (8)
25 Tudor/NY NY	No	--- (8)	--- (8)	Yes	--- (9)	--- (8)

(2) "NA" means not applicable, because unit is subject to NEHSAP ZZZZ, rather than NSPS JJJJ.
(3) AEGIS performs regular testing of engines in-house prior to shipment, but test procedures are not strictly in compliance with requirements specified in 60.4244. In addition, AEGIS has contracted 3rd party performance tests on selected engines which document compliance with applicable emissions standards. Results of 3rd party testing are separately summarized in Table 2.
(4) Unit originally installed without catalytic converters. In-house and 3rd party testing is not representative of originally installed configuration in these cases. Please see letter for dicussion of these engines.
(5) "No" indicates that engine was installed after July 1, 2008, but was not certified by manufacturer in accordance with applicable requirements or was not performance tested in accordance with applicable requirements. Such units technically do not meet the standards because a manufacturer's certification is not available or performance tests per the referenced test methods/procedures have not been conducted. As indicated in footnote (3), Aegis has performed regular in-house testing and has contracted for 3rd party testing to satisfy engine certification requirements under certain state regulations. However, the in-house testing was not performed in accordance with all procedures in Table 2 to Part JJJJ and 3rd party testing using EPA Reference Methods was not performed on every engine.
(6) Please see letter for dicussion of these engines.
(7) No initial notification required for this size engine. Notification of performance tests not made. However, records of maintenance conducted on each engine are kept.
(8) Performance tests required within 1 year of startup (60.4243(a)(2)(ii)). These units have been in service for less than 1 year.
(9) Maintenance records are maintained. Notifications of performance tests not yet required as these units have been in service for less than 1 year and have not yet conducted tests.

Table 1: AEGIS Energy Services/PV LLC/PV II LLC Owned/Operated CHP Units
Compliance Information

	AEGIS-performed test data						
Engine Location	**NOX ppm[10]**	**NOX ppmvd @ 15% O2[11] [NSPS Limit = 160]**	**CO%[12]**	**CO ppmvd @ 15% O2[11] [NSPS Limit = 540]**	**Total HC[13] ppm**	**VOC[14] ppmvd @ 15% O2 [NSPS Limit = 86]**	**O2%[10]**
Holyoke A/Holyoke MA							
Holyoke B/Holyoke MA							
Ashlar 1 and 2/Newtown CT							
Harbor Point 15SP/Boston MA							
Harbor Point 40WW/Boston MA							
Harbor Point 47SP/Boston MA							
Harbor Point 55WW/Boston MA							
Pequot Highlands/Salem MA							
Whitney Place/Natick MA							
Sahara Sams/West Berlin NJ							
St Mary's WCH/Boston MA							
Carden Hall/New York NY							
Bay Ridge 1 and 2/NY NY							
Conte School/New Haven CT							
Hill Regional/New Haven CT							
James Hillhouse/New Haven CT							
Martinez school/New Haven CT							
Schwab House/NY NY #1	112	32	1.52%	4,291	439		0.00%
Schwab House/NY NY #2	125	35	1.67%	4,714	506		0.00%
Schwab House/NY NY #3	153	45	1.16%	3,439	185		1.00%
Schwab House/ NY NY #4	118	35	1.41%	4,139	282		0.80%
Sound School/New Haven CT							
Wilbur Cross HS/New Haven CT							
Trump Village/NY NY #1	103	29	1.66%	4,709	185		0.10%
Trump Village/NY NY #2	99	28	0.81%	2,298	297		0.10%
Trump Village/NY NY #3	158	45	0.15%	423	201		0.00%
Trump Village/NY NY #4	105	30	1.24%	3,500	255		0.00%
Harway Terrace/NY NY							
Stevenson Commons/ NY NY #1	131	37	0.01%	28	366		0.00%
Stevenson Commons/ NY NY #2	108	30	0.01%	28	305		0.00%
Stevenson Commons/ NY NY #3	79	22	0.04%	113	37		0.00%
Stevenson Commons/ NY NY #4	158	45	0.02%	57	118		0.02%
Stevenson Commons/ NY NY #5	161	45	0.02%	56	270		0.00%
Stevenson Commons/ NY NY #6	136	39	0.03%	86	287		0.30%
Stevenson Commons/NY NY #7	104	30	0.02%	58	301		0.70%
Westcott Terrace/W Warwick RI	52	15	0.04%	113	439		0.00%
NHJCC/ New Haven CT							
The Ohm/NY NY							
25 Tudor/NY NY							

10. Uncorrected dry concentration (ppm and % volume) measurements performed by AEGIS prior to customer delivery. All results obtained from Ferret Instruments GasLink Emissions Analyzer model 14. Aegis took delivery of new ECOM J2KN Pro analyzer in December 2013 for all internal engine testing conducted after that date.

11. Calculated ppm corrected to 15% O2.

12. Yellow-highlighted values indicate that the results are unrealistically high (likely by a factor of 100) for a natural gas-fired spark-ignition engine controlled with a catalytic converter. Other Aegis-performed tests and 3rd-party tests conducted on the same engine configuration resulted in much lower CO emissions, in compliance with the applicable CO limit. Therefore, the accuracy of the yellow-highlighted values is highly questionable. These test results may also be irrelevant today because these engines in some cases have undergone maintenance, including engine block replacement and/or catalyst replacement.

13. Total methane and non-methane hydrocarbons. Not for comparison to NSPS JJJJ VOC emission standard.

14. Applicable standard is for volatile organic compounds, excluding formaldehyde.

Table 1: AEGIS Energy Services/PV LLC/PV II LLC
Compliance Information
3rd Party Emissions Testing performed by AirTox Environmental Co.

Applicable Emissions Standards - NSPS Subpart JJJJ:

NOX		CO		VOC[1]	
ppmvd @ 15% O2	g/HP-hr	ppmvd @ 15% O2	g/HP-hr	ppmvd @ 15% O2	g/HP-hr
160	2.0	540	4.0	86	1.0

						NOX		CO		VOC		O2%
Test Contractor	**Test Purpose**	**Test Date**	**Tested Engine**	**Fuel Controller Mfg./model**	**Catalyst Description (none, single- or double-layer)**	**ppmvd @ 15% O2**	**g/HP-hr**	**ppmvd @ 15% O2**	**g/HP-hr**	**ppmvd @ 15% O2**	**g/HP-hr**	**%, vol.**
AirTox Environmental Co.	Voluntary certification	11/4/2011	Aegen TP-75	Woodward	single layer	39.1	0.56	50.8	0.43	19.8	0.17	0.1
AirTox Environmental Co.	NJDEP certification	5/9/2012	Aegen TP-75	Woodward	single layer	1.5	0.03	24.2	0.24	57.9	0.58	0
AirTox Environmental Co.	NJDEP certification	11/25/2013	Aegen TP-75	Continental	double layer	3.3		4.7		4.3		

TABLE 2
AEGIS Energy Services/PV LLC/PV II LLC Owned/Operated Units

COMPANY NAME	**Aegis Energy Services, Inc.**	**PowerVestors LLC**	**PowerVestors II LLC**
Address	55 Jackson St Holyoke MA	55 Jackson St Hoyoke MA	55 Jackson St Holyoke MA
Telephone	(413) 536-1156	(413) 536-1156	(413) 536-1156
Fax	(413)536-1104	(413)536-1104	(413)536-1104
email	leev@aegisenergyservices.com	leev@aegisenergyservices.com	leev@aegisenergyservices.com
President/Manager	Lee Vardakas	Lee Vardakas (Manager)	Lee Vardakas (Manager)
Major Shareholder	Spiro Helen Vardakas Trust	Aegis Energy Services, Inc (75%)	Aegis Energy Services, Inc. (75%)
Minor Shareholder %	none	All 4% or less	All 5% or less
Location Incorporation	Massachusetts (1985)	Massachusetts	Massachusetts

Table 3 : AEGIS Energy Services/PV LLC/PV II LLC Owned/Operated CHP Units Compliance Information

ROUTINE/SCHEDULED MAINTENANCE

MAINTENANCE PERFORMANCE	SERVICE INTERVAL (HOURS)		
	750	2250	4500
A. Oil Change	X		
B. Replace Oil Filter	X		
C. Replace Air Filter	X		
D. Inspect Battery	X		
E. Check Coolant (if applicable)	X		
F. Clean Air Louvers	X		
G. Check Carburetor Adjustment	X		
H. Tighten Electric Interface Connections	X		
I. Check PCV System	X		
J. Check /Replace Spark Plugs	1500Hours*		
K. Check Ignition System		X	
L. Check Exhaust Heat Exchanger Drain Traps (if applicable)	X		
M. Check Connections at Generator Box		X	
N. Check Vibration Mounts			X

* every 1500 hours. (Except after engine change or cylinder head change, then check and replace after the first 750 hours and then at 1500 hours)

MAJOR MAINTENANCE

Engine Replacements	Approximately every 30,000 hours or as needed. (2-5 years depending on runtimes)
Catalyst Replacements	As needed upon inspection.
Heat Exchanger	As needed.
Controller Replacements	As needed upon inspection.
Major Engine Parts (e.g.cylinder head)	As needed.